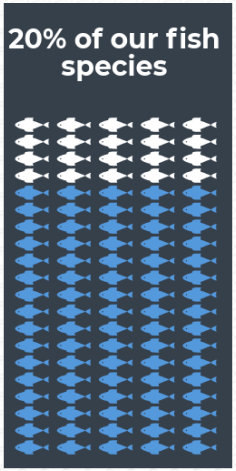
STATEWIDE ECOLOGICAL EXTINCTION TASK FORCE & DELAWARE NATIVE SPECIES COMMISSION

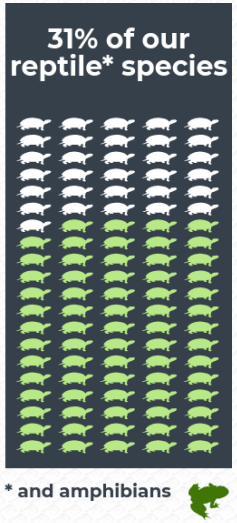
State Senator Stephanie Hansen, 10th Senate District

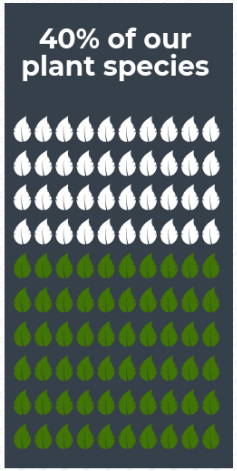
Establishment of the Statewide Ecological Extinction Task Force (SCR 20; 2017)

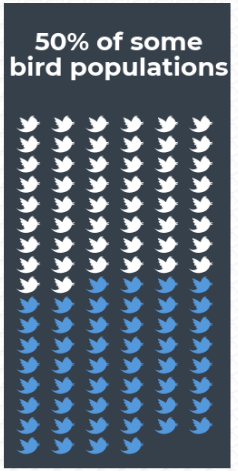
- **Bringing Nature Home; Prof. Douglas W. Tallamy**
- 41% of Delaware's bird species that depend on forest cover are rare or absent.
- 40% of all native plant species are threatened or already extirpated from DE.
- 31% of our native reptiles and amphibians have been lost.
- 20% of our native fish species have been lost.
- 50% reduction in population sizes for many of our bird species within a span of 50 years.

Delaware's native plant and animal species are disappearing.









Members of the Task Force

- Legislators (Hansen, Heffernan, Richardson, Gray)
- All three Counties
- DNREC
- Dept. of Agriculture
- Center for the Inland Bays
- DE Association of Realtors
- DE Landscape & Nursery Association
- DE Farm Bureau
- UD Dept. of Entomology and Wildlife Ecology
- Homebuilders Assoc.
- DE Nature Society
- DE Nature Conservancy
- Delmarva Ornithological Society
- Delaware State Chamber of Commerce

Task Force Work

- Met 9 times between July 2017 and November 2017
- Presentations and vigorous debate
- Agreement on >80 recommendations in 9 categories
  - Education
  - Incentivizing Private Landowners
  - Government Leads by Example
  - Legislation Affecting Development
  - Funding Opens Space Program at Statutory Level
  - Prohibit the Sale of Invasive Species
  - Deer Management
  - Recovering America's Wildlife Act
  - Formation of the Delaware Native Species Commission (SB 153)
- Final Report dated Dec. 1st, 2017, available on General Assembly website


They're being replaced with non-native species that can't support our food supply.
Native (24%)
Non-native (76%)
Plants sold in local nurseries
Icon made by Freepik from www.flaticon.com
Much of our food chain, including 90% of insects, are specialists that rely on local organisms for survival.
?
?

That's a big problem.

Because organisms at the bottom of our food chain...

...support organisms at the top.

Take Aways from the Research

- There are few wild places left and what is left is too small and too fragmented to sustain biodiversity into the future. Therefore, urban, suburban, exurban, residential, corporate and public landscapes must be redesigned to enhance local ecosystem function rather than degrade it.
- Major drivers of extinction are habitat loss, habitat fragmentation, climate change, and displacement of native species by non-native and invasive species.
- Many species could live sustainably with us if we would design our living spaces to accommodate them.

WE CAN'T ACCEPT THIS

AND WE DON'T HAVE TO

ncrease deer harvest as necessary to reduce impacts to key habitats."

Most cost the state nothing

"revising lan anagement practices to be more pollinator friend

lain the benefit of native species as well as t n-native and invasive species proliferation"

On all highwa ians, mow a strip of grass adjacent to the roadway (beauty strip) and allow the rest of the vegetation to grow

and none are punitive.

"Fun e Delaware Open Space Program at the leve equired by

Plant Choice Matters

- Natural areas are choked with invasive plants
  - 85% of our woody invasive plants are escaped Asian ornamentals, several of which are still sold today.

Non-native plants are unable to support the specialized relationships between animals and plants that comprise much of nature.

90% of the insects upon which our ecosystem relies can develop on only a few plants lineages with which they share an evolutionary history. Native plants support 22 time more insects than non-native plants.

Native oaks, cherries, willows, birches, maples, elms, blueberries, alders, and pines produce about 75% of the insect food that drives food webs in Delaware.

Although we need to continue to protect existing wildlands, we must also encourage the ecological restoration of built landscapes throughout DE.

How difficult is it to buy native plants?

- Native and Invasive Plants Sold by the Mid-Atlantic Nursery Industry;
  Mt. Cuba Center
  April 10, 2017, updated February 2018
- 14 Nurseries surveyed in MD, NJ, VA, and PA
- 6,885 different taxa of plants sold, with 75% of all taxa being non-native and only 25% being native.
- "Native" includes native species, cultivars of native species, and hybrids of native species.
- 4% of the taxa (26 species) were invasive or on the invasive watch list.

- Sen. Hansen Intern Researchers, Fall 2017
- 5 Delaware retail establishments surveyed (Willey Farms, Lowe's, Mid-County Material Supply and Garden Center, Home Depot, and Countryside Nursery)
- Referred to "Non-Native and Invasive Plants in Delaware", William McAvoy, 2016.
- 1,149 plant species, with 77% being non-native and 23% native.
- 4% of all species were invasive or on the invasive watch list.
- By number of plants sold, 83% were non-native, with 17% native.

Most Popular Invasives Among Growers

1. Chinese silver grass- *Miscanthus sinensis* (12/14)
2. Common periwinkle- *Vinca minor* (9/14)
3. Japanese barbery- *Berberis thunbergii* (8/14)
4. Burning bush- *Euonymus alatus* (6/14)
5. California privet- *Ligustrum ovalifolium* (6/14)
6. Bradford pear- *Pyrus calleryana* (6/14)
7. English ivy- *Hedera helix* (6/14)
8. Sweet autumn clematis- *Clematis terniflora* (6/14)
9. Japanese pachysandra- *Pachysandra terminalis* (5/14)

Chinese silver grass
Miscanthus sinensis

Common periwinkle - *Vinca minor*

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Formation of the Delaware Native Species Commission (SB 153)

- First meeting held July 31, 2017
- 15 Members, split evenly between government, environmental groups, and business.
- DNREC provides administrative support.
- Chair: Jim White (Delaware Nature Society)
- Contact: David Saveikis (David.Saveikis@state.de.us)

To find the best plants for your county, enter your zip code into the website below.

“Native Plant Finder” National Wildlife Federation

http://www.nwf.org/NativePlantFinder/